

## Centre de Neurosciences Psychiatriques

## **CNP SEMINAR**

## **ANNOUNCEMENT**

Tuesday, April 9, 2013, 11:15

"The interface of psychosis and depression in translational psychiatry"

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<a href="http://www.hopkinsmedicine.org/psychiatry/specialty\_areas/schizophrenia/director.html">http://www.hopkinsmedicine.org/psychiatry/specialty\_areas/schizophrenia/director.html</a>

Invited by Kim Do Cuénod (Kim.Do@chuv.ch)

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Based on my training in both clinical psychiatry and basic molecular neuroscience, my own research program aims translational study for major mental illnesses, such as schizophrenia and Huntington's disease, with a particular emphasis on molecular pathways of the diseases. In my program, there are three key projects of (1) molecular pathways involving genetic risk factors and production of animal models in order to test gene environmental interaction in the developmental trajectory of the disease pathologies, (2) molecular study of stress sensing mechanism, especially that to oxidative stress and inflammation, in the context of the pathologies of mental illnesses (in particular, those at disease onset), and (3) analysis of molecular expression and functional profiling with patient cells and tissues (iN cells, iPS cells, and olfactory neurons), all of which are aimed to be integrated towards molecular understanding of mental illnesses. I also lead P50 Silvo O. Conte center grant, which takes multifaceted translational approach on DISC1 interactome and schizophrenia. In addition to research activities, I serve the director of Johns Hopkins Schizophrenia Center where we work on clinic, research, professional education, and public outreach towards better care and cure for schizophrenia.

## Recent publications:

- Ishizuka K, Kamiya A, Oh EC, Kanki H, Seshadri S, Robinson JF, Murdoch H, Dunlop AJ, Kubo K, Furukori K, Huang B, Zeledon M, Hayashi-Takagi A, Okano H, Nakajima K, Houslay MD, Katsanis N, <u>Sawa A.</u> DISC1-dependent switch from progenitor proliferation to migration in the developing cortex. *Nature*, 473:92-96 (2011)
- Brandon NJ, <u>Sawa A.</u> Linking neurodevelopmental and synaptic theories via DISC1. *Nature Rev Neurosci*, 12:707-722 (2011)
- Niwa M, Jaaro-Peled H, Tankou S, Seshadri S, Hikida T, Matsumoto Y, Cascella NG, Kano S, Ozaki N, Nabeshima T, <u>Sawa A.</u> Adolescent stress-induced epigenetic control of dopaminergic neurons via glucocorticoids *Science*, 339:335-339 (2013)

